

CLAIMS:

1. A photoresist pattern with a reinforcing section, wherein there is provided a line section and a reinforcing section that continues to said line section and that has a greater width than a line width of said line section.
2. A method of forming a photoresist pattern comprising; forming a photoresist pattern with a reinforcing section according to claim 1 by a process comprising forming on a substrate a photoresist film, exposing the photoresist film, and developing the photoresist film.
3. A method of forming a photoresist pattern according to claim 2, comprising forming on said substrate a sublayer film that is soluble in a developing solution used in said developing process, and forming said photoresist film on said sublayer film.
4. A method of evaluating a photoresist pattern, comprising forming on a substrate said photoresist pattern with a reinforcing section, using the method of forming a photoresist pattern according to either one of claim 2 and claim 3, to create an evaluation substrate, and splitting said evaluation substrate in a cross section perpendicular to the lengthwise direction of said line section to observe said cross section.
5. A method of evaluating a photoresist pattern according to claim 4, wherein when creating said evaluation substrate, a plurality of photoresist patterns with reinforcing sections is formed such that lengthwise directions of line sections are parallel, and locations of reinforcing sections in the lengthwise direction of the line sections are different for adjacent photoresist patterns with reinforcing sections.

6. A method of manufacturing a device using a lithographic method that includes a process of forming on a substrate a photoresist pattern having a line section on at least part thereof, wherein said photoresist pattern is formed such that there is provided on said line section a reinforcing section having a greater width than the line width of said line section, or a plurality of such reinforcing sections with spaces between them.

7. A mask used when exposing a photoresist film formed on a substrate, wherein a shape of either one of an exposure region and a non exposure region of said mask comprises a succession of line sections, and reinforcing sections having a greater width than a line width of said line sections.

8. A writing system used when drawing on a photoresist film formed on a substrate, which comprises an electron beam direct writing system that is provided with: a holding device for holding said substrate; an irradiating device for irradiating an electron beam onto said substrate; a moving device for moving a location on said substrate irradiated by said electron beam; and a control device for creating pattern data to determine an irradiation region of said electron beam on said substrate according to input information, and for controlling said moving device and said irradiating device based on said pattern data,

wherein the shape of the irradiation region of said electron beam is set to the shape of a succession of line sections, and reinforcing sections having a greater width than the line width of said line sections, and it is possible to input as said information, the line width of the line section, the length of the line section, the shape of the reinforcing section, the maximum width of the reinforcing section, and the length of the reinforcing section.